

**DECLARATION OF PERFORMANCE**  
**No 1S-T1B0-002**  
 According to regulation No 305/2011

Unique identification code of the product-type: **Self - supporting double skin metal faced insulating panels (sandwich panels) TENAX with EPS core**

Product name:

<b>TENAX TR80 EPS S10</b>	<b>TENAX TR120 EPS S10</b>	<b>TENAX TR190 EPS S10</b>
<b>TENAX TR85 EPS S10</b>	<b>TENAX TR125 EPS S10</b>	<b>TENAX TR195 EPS S10</b>
<b>TENAX TR90 EPS S10</b>	<b>TENAX TR130 EPS S10</b>	<b>TENAX TR200 EPS S10</b>
<b>TENAX TR95 EPS S10</b>	<b>TENAX TR135 EPS S10</b>	<b>TENAX TR205 EPS S10</b>
<b>TENAX TR100 EPS S10</b>	<b>TENAX TR140 EPS S10</b>	<b>TENAX TR210 EPS S10</b>
<b>TENAX TR105 EPS S10</b>	<b>TENAX TR145 EPS S10</b>	<b>TENAX TR215 EPS S10</b>
<b>TENAX TR110 EPS S10</b>	<b>TENAX TR150 EPS S10</b>	<b>TENAX TR220 EPS S10</b>
<b>TENAX TR115 EPS S10</b>	<b>TENAX TR155 EPS S10</b>	<b>TENAX TR225 EPS S10</b>
	<b>TENAX TR160 EPS S10</b>	<b>TENAX TR230 EPS S10</b>
	<b>TENAX TR165 EPS S10</b>	<b>TENAX TR235 EPS S10</b>
	<b>TENAX TR170 EPS S10</b>	<b>TENAX TR240 EPS S10</b>
	<b>TENAX TR175 EPS S10</b>	
	<b>TENAX TR180 EPS S10</b>	
	<b>TENAX TR185 EPS S10</b>	

Intended use: **for roofs and roof claddings**

Manufacturer: **TENAX PANEL, SIA,  
 Spodriibas 1, Dobeles, Latvia, LV- 3701**

System/s of AVCP: **System 4**

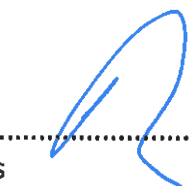
Harmonised standard: **EN 14509:2013**

Notified body/ies: **-**

The performance of the product identified above is in conformity with the set of declared performance/s (see attachments No 1, No 2, No 3 and No 4).

This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:  
**TENAX PANEL, SIA Product development director**

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**Uldis Reknars**  
**19.02.2019.**

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**Declaration of Performance No 1S-T1B0-002, Annex 1**

Sandwich panels TENAX TR80 EPS S10, TENAX TR85 EPS S10, TENAX TR90 EPS S10, TENAX TR95 EPS S10

Year when CE mark was affixed	10			
Essential characteristics	Performance			
Metal facings				
Thickness, mm	0,5; 0,6			
Steel name	S250GD; S280GD; S320GD			
Organic coating type and thickness	SP25; PVDF35			
Core material				
EPS density, kg/m <sup>3</sup>	16,5			
Thermal conductivity, W/m·K	0,038			
Panel				
Thickness, mm	80	85	90	95
Panel weight, kg/m <sup>2</sup> (metal thickness 0,5/0,5 mm)	11,1	11,1	11,2	11,3
Shear modules of the core material, MPa	2,6	2,6	2,5	2,5
Shear strength of the panel, MPa	0,06	0,06	0,06	0,06
Long term shear strength, MPa	0,02	0,02	0,02	0,02
Creep coefficient				
- t = 2 000 h	0,75	0,75	0,75	0,75
- t = 100 000 h	0,80	0,80	0,80	0,80
Compressive strength of the core material, MPa	0,08	0,08	0,08	0,08
Cross-panel tensile strength, MPa	0,10	0,10	0,10	0,10
Wrinkling stress for inner face				
- in span	80	80	80	80
- for loads pressing at an internal support	80	80	80	80
Wrinkling stress for outer face, MPa				
- in span	100	100	100	100
- in span at elevated temperature	NPD	NPD	NPD	NPD
- for loads suction at an internal support	80	80	80	80
- for loads suction at an internal support at elevated temperature	NPD	NPD	NPD	NPD
Thermal transmittance, W/m <sup>2</sup> ·K	0,45	0,42	0,40	0,38
Durability	Pass – light and medium light colours			
Resistance to point loads	NPD			
Resistance to access loads, kPa	Not pass			
Reaction to fire	NPD			
Fire resistance	NPD			
Water permeability	NPD			
Air permeability	NPD			
Airborne sound insulation	NPD			
Sound absorption	NPD			

**Declaration of Performance No 1S-T1B0-002, Annex 2**
**Sandwich panels**

TENAX TR100 EPS S10, TENAX TR105 EPS S10, TENAX TR110 EPS S10, TENAX TR115 EPS S10,  
TENAX TR120 EPS S10, TENAX TR125 EPS S10, TENAX TR130 EPS S10, TENAX TR135 EPS S10,  
TENAX TR140 EPS S10, TENAX TR145 EPS S10

Year when CE mark was affixed	10									
Essential characteristics	Performance									
<b>Metal facings</b>										
Thickness, mm	0,5; 0,6									
Steel name	S250GD; S280GD; S320GD									
Organic coating type and thickness	SP25; PVDF35									
<b>Core material</b>										
EPS density, kg/m <sup>3</sup>	16,5									
Thermal conductivity, W/m-K	0,038									
<b>Panel</b>										
Thickness, mm	100	105	110	115	120	125	130	135	140	145
Panel weight, kg/m <sup>2</sup> (metal thickness 0,5/0,5 mm)	11,4	11,5	11,5	11,6	11,7	11,8	11,9	12,0	12,0	12,1
Shear modulus of the core material, MPa	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5
Shear strength of the panel, MPa	0,06	0,06	0,06	0,06	0,05	0,05	0,05	0,05	0,05	0,05
Long term shear strength, MPa	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02
Creep coefficient										
- t = 2 000 h	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75
- t = 100 000 h	0,80	0,80	0,80	0,80	0,80	0,80	0,80	0,80	0,80	0,80
Compressive strength of the core material, MPa	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,08
Cross-panel tensile strength, MPa	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10
Wrinkling stress for inner face										
- in span	80	80	80	80	80	80	80	80	80	80
- for loads pressing at an internal support	80	80	80	80	80	80	80	80	80	80
Wrinkling stress for outer face, MPa										
- In span	100	100	100	100	100	100	100	100	100	100
- in span at elevated temperature	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
- for loads suction at an internal support	80	80	80	80	80	80	80	80	80	80
- for loads suction at an internal support at elevated temperature	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Thermal transmittance, W/m <sup>2</sup> -K	0,36	0,35	0,33	0,32	0,30	0,29	0,28	0,27	0,26	0,25
Durability	Pass – light and medium light colours									
Resistance to point loads	NPD									
Resistance to access loads, kPa	Not pass									
Reaction to fire	NPD									
Fire resistance	NPD									
Water permeability	NPD									
Air permeability	NPD									
Airborne sound insulation	NPD									
Sound absorption	NPD									

**Declaration of Performance No 1S-T1B0-002, Annex 3****Sandwich panels**

TENAX TR150 EPS S10, TENAX TR155 EPS S10, TENAX TR160 EPS S10, TENAX TR165 EPS S10,  
TENAX TR170 EPS S10, TENAX TR175 EPS S10, TENAX TR180 EPS S10, TENAX TR185 EPS S10,  
TENAX TR190 EPS S10, TENAX TR195 EPS S10

Year when CE mark was affixed	<b>10</b>									
<b>Essential characteristics</b>	<b>Performance</b>									
<b>Metal facings</b>										
Thickness, mm	0,5; 0,6									
Steel name	S250GD; S280GD; S320GD									
Organic coating type and thickness	SP25; PVDF35									
<b>Core material</b>										
EPS density, kg/m <sup>3</sup>	16,5									
Thermal conductivity, W/m·K	0,038									
<b>Panel</b>										
Thickness, mm	150	155	160	165	170	175	180	185	190	195
Panel weight, kg/m <sup>2</sup> (metal thickness 0,5/0,5 mm)	12,2	12,3	12,4	12,5	12,5	12,6	12,7	12,8	12,9	13,0
Shear modulus of the core material, MPa	2,3	2,3	2,3	2,3	2,3	2,3	2,2	2,2	2,2	2,2
Shear strength of the panel, MPa	0,05	0,05	0,05	0,05	0,05	0,05	0,05	0,05	0,05	0,05
Long term shear strength, MPa	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02
Creep coefficient										
- t = 2 000 h	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75
- t = 100 000 h	0,80	0,80	0,80	0,80	0,80	0,80	0,80	0,80	0,80	0,80
Compressive strength of the core material, MPa	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,08
Cross-panel tensile strength, MPa	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10
Wrinkling stress for inner face										
- in span	80	80	80	80	80	80	80	80	80	80
- for loads pressing at an internal support	80	80	80	80	80	80	80	80	80	80
Wrinkling stress for outer face, MPa										
- in span	100	100	100	100	100	100	100	100	100	100
- in span at elevated temperature	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
- for loads suction at an internal support	80	80	80	80	80	80	80	80	80	80
- for loads suction at an internal support at elevated temperature	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Thermal transmittance, W/m <sup>2</sup> ·K	0,25	0,24	0,23	0,22	0,22	0,21	0,21	0,20	0,20	0,19
Durability	Pass – light and medium light colours									
Resistance to point loads	NPD									
Resistance to access loads, kPa	Not pass									
Reaction to fire	NPD									
Fire resistance	NPD									
Water permeability	NPD									
Air permeability	NPD									
Airborne sound insulation	NPD									
Sound absorption	NPD									

**Declaration of Performance No 1S-T1B0-002, Annex 4**

Sandwich panels TENAX TR200 EPS S10, TENAX TR205 EPS S10, TENAX TR210 EPS S10,  
TENAX TR215 EPS S10, TENAX TR220 EPS S10, TENAX TR225 EPS S10, TENAX TR230 EPS S10,  
TENAX TR235 EPS S10, TENAX TR240 EPS S10

Year when CE mark was affixed	10								
Essential characteristics	Performance								
Metal facings									
Thickness, mm	0,5; 0,6								
Steel name	S250GD; S280GD; S320GD								
Organic coating type and thickness	SP25; PVDF35								
Core material									
EPS density, kg/m <sup>3</sup>	16,5								
Thermal conductivity, W/m-K	0,038								
Panel									
Thickness, mm	200	205	210	215	220	225	230	235	240
Panel weight, kg/m <sup>2</sup> (metal thickness 0,5/0,5 mm)	13,0	13,1	13,2	13,3	13,4	13,4	13,5	13,6	13,7
Shear modules of the core material, MPa	2,1	2,1	2,1	2,1	2,0	2,0	2,0	2,0	2,0
Shear strength of the panel, MPa	0,04	0,04	0,04	0,04	0,04	0,04	0,04	0,04	0,04
Long term shear strength, MPa	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,01
Creep coefficient									
- t = 2 000 h	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75
- t = 100 000 h	0,80	0,80	0,80	0,80	0,80	0,80	0,80	0,80	0,80
Compressive strength of the core material, MPa	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,08
Cross-panel tensile strength, MPa	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10
Wrinkling stress for inner face									
- in span	80	80	80	80	80	80	80	80	80
- for loads pressing at an internal support	80	80	80	80	80	80	80	80	80
Wrinkling stress for outer face, MPa									
- in span	100	100	100	100	100	100	100	100	100
- in span at elevated temperature	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
- for loads suction at an internal support	80	80	80	80	80	80	80	80	80
- for loads suction at an internal support at elevated temperature	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Thermal transmittance, W/m <sup>2</sup> -K	0,19	0,18	0,18	0,17	0,17	0,17	0,16	0,16	0,16
Durability	Pass – light and medium light colours								
Resistance to point loads	NPD								
Resistance to access loads, kPa	Not pass								
Reaction to fire	NPD								
Fire resistance	NPD								
Water permeability	NPD								
Air permeability	NPD								
Airborne sound insulation	NPD								
Sound absorption	NPD								